

CLAIMS

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1. A device for apply a coating to an optical fiber, the device including:
- a die-support,
 - 5 - a grid for applying the coating to the optical fiber, the grid being made in one piece with the die-support, and
 - an entry die and an exit die disposed in the die-support on respective opposite sides of the grid and
 - 10 defining a passage for the optical fiber.

2. The device of claim 1, wherein the entry die is disposed in a housing of the die-support whose diameter is greater than the inside diameter of the grid.

3. The device of claim 1, wherein a radial face of the entry die is pressed against a first radial wall of the die-support.

4. The device of claim 3, wherein a hollow part screwed into the die-support presses the entry die against the first radial wall.

5. The device of claim 1, wherein the exit die is disposed in a housing of the die-support whose diameter is greater than the inside diameter of the grid.

6. The device of claim 5, wherein a radial face of the exit die bears against a second radial wall of the die-support.

7. The device of claim 6, wherein a hollow part screwed into the die-support presses the exit die against the second radial wall.

8. The device of claim 1, wherein the outside diameter of the die-support on each side of the grid is greater

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than the outside diameter of the grid.

9. The device of claim 8, wherein $D > \sqrt{(d_i^2 + d_o^2)}$ where D is the outside diameter of the die-support on each side of the grid, d_i is the inside diameter of the grid and d_o is the outside diameter of the grid.

10. The device of claim 8, wherein $D > 2\sqrt{(d_i^2 + d_o^2)}$ where D is the outside diameter of the die-support on each side of the grid, d_i is the inside diameter of the grid and d_o is the outside diameter of the grid.

10 ~~11. An installation for applying a coating to an optical fiber, including a support in which there is disposed a device according to claim 1, the support including means for feeding coating liquid around the grid.~~

12. The installation of claim 11, wherein a chamber is defined around the grid and is connected to the coating liquid feed means, in which the chamber has a volume greater than the inside volume of the grid.

13. The installation of claim 12, wherein the coating liquid feed means include a plurality of passages discharging radially into the chamber.

~~14. A die-support including a cylindrical grid of circular inside section made in one piece with the die-support and a receiver on each side of the grid to receive a respective die.~~

15. The die-support of claim 15, wherein the outside diameter of the die-support on respective opposite sides of the grid is greater than the outside diameter of the grid.

16. The die-support of claim 15, wherein $D > \sqrt{(d_i^2 + d_o^2)}$

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17. The die-support of claim 15, wherein $D > 2\sqrt{(d_i^2 + d_o^2)}$ where D is the outside diameter of the die-support on each side of the grid, d_i is the inside diameter of the grid and d_o is the outside diameter of the grid.